DH-SD2A500-GN-AW-PV

5MP IR and White Light Full-color Network PT Camera

· 1/2.8" 5Megapixel STARVIS™ CMOS
· Max. 20 fps@5 MP
· Human detection
· Tripwire, intrusion
· H.265 encoding
· Wi-Fi
· Two-way audio
· Sound and light alarm
· IR and white light, three night view modes
· IP66

Two-way Audio	Sound and Light Alarm	Smart Dual Illuminators	Human Detection	Tripwire	Intrusion

System Overview

Driven by advanced smart H.265 encoding technology, Dahua Smart Dual Illuminators Camera combines precision and reliability into one powerful camera, achieving high encoding efficiency, producing seamless videos and reducing cost on transmission and storage. To meet a wide range of shooting situations, this series of high-performant cameras features functions such as infrared and warm light smart illumination, human shape detection, and siren and light active deterrence. It also achieves the application of retrospect, intervention and precaution, delivering the convenience needed in a modern camera.

Functions

Smart Dual Illuminators

Dahua Smart Dual Illuminators technology adopts smart algorithm to detect targets. Usually, the IR illuminator is on at night; when the target appears in the monitoring area, the white light is on, and the camera records the full-color video and information of key events. That is, the camera links snapshot and video with full-color image. When the target is out of the monitoring area, the white light is off and the IR illuminator is on, which reduces light pollution efficiently.

Siren and Light Active Deterrence

The camera supports the white light alarm and voice alarm when perimeter event occurs, to realize the deterrence and effective intervention. The camera is built in the alarm voice, and supports customized voice importing.

IVS

With advanced video algorithm, Dahua IVS technology supports intelligent functions, such as tripwire and intrusion.

Wide Dynamic Range

The camera produces vivid images, even in high-contrast lighting conditions, by using industry-leading wide dynamic range (WDR) technology. For scenes that quickly alternate between bright and low lighting, WDR adjusts to fully capture both the bright and dark areas of a scene, producing superior quality videos.

Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, a flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality videos without straining the network. Smart H.265+ technology outranks standard H.265 video compression, reducing bit rate and storage requirements by up to 70%.

Scene

It is suitable for use by families and in fish ponds, orchards, rural courtyards, small factories, supermarkets and other similar locations.

Technical Specification

Camera

Image Sensor	1/2.8" CMOS
Pixel	5 MP
Max. Resolution	2560 (H) × 1920 (V)
ROM	128 MB
RAM	128 MB
Electronic Shutter Speed	1/3 s–1/100,000 s
Scanning System	Progressive
Min. Illumination	Color: 0.005 lux@F1.6 B/W: 0.0005 lux@F1.6 0 lux (illuminator on)
Illumination Distance	30 m (98.42 ft) (IR) 30 m (98.42 ft) (white light)
Illuminator On/Off Control	Manual; auto; off
Illuminator Number	1 (IR light) 2 (white light)

Lens

Focal Length	4.0 mm
Max. Aperture	F1.6
Field of View	H: 80.4°; V: 58.1°; D: 104.8°
Close Focus Distance	0.3 m (0.98 ft)
Iris Control	Fixed

	Detect	Observe	Recognize	Identify
DORI Distance	77.4 m (253.94 ft)	31.0 m (101.71 ft)	15.5 m (50.85 ft)	7.74 m (25.39 ft)

PTZ

Pan/Tilt Range	Pan: 0° to 345° Tilt: 0° to +80°
Manual Control Speed	Pan: 0.1°–74°/s Tilt: 0.1°–36.4°/s
Preset Speed	Pan: 62°/s; Tilt: 36.3°/s
Preset	300
Power-off Memory	Yes
Idle Motion	Preset

Smart Event

IVS	Tripwire; intrusion

Active Deterrence

Light Warning	White light warning Flash duration: 5 s–30 s Flash frequency: high, medium, low
Sound Warning	Sound warning alarm: Customizable Alarm duration: 10 s, 20 s, 30 s

Video

Video Compression	Smart H.265+; H.265; Smart H.264+; H.264; H.264B; MJPEG (Sub Stream 1)
Streaming Capability	2 Streams
Resolution	5M (2560 × 1920); 4M (2560 × 1440); 1080p (1920 × 1080); 960p(1280x960); 720p (1280 × 720); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240)
Video Frame Rate	Main stream: 5M (1–20 fps); 4M/1080p/1.3M/720p (1–25/30 fps) Sub stream 1: D1/CIF (1–25/30 fps)
Bit Rate Control	VBR; CBR
Video Bit Rate	H.264: 32 kbps–8192 kbps H.265: 32 kbps–8192 kbps
Day/Night	Auto (ICR); Color; B/W
BLC	Yes
WDR	DWDR
HLC	Yes
White Balance	Auto; indoor; outdoor; tracking; manual; sodium lamp; natural; street lamp
Gain Control	Auto; Manual
Noise Reduction	2D NR; 3D NR
Motion Detection	Yes
Image Rotation	180°
S/N Ratio	≥ 55 dB

Audio

Audio Compression	G.711a; G.711Mu; G.726; G.722.1; G.729; MPEG2-Layer2; G723

Network

Network Port	RJ-45 (10/100 Base-T)
Wi-Fi	Yes
Wi-Fi–Wireless Standard	802.11n; 802.11g; IEEE802.11b
Wi-Fi–Wireless Transmission Rate	150 Mbps
Network Protocol	HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; IPv6; SSL; FTP; ARP; RTCP; RTP; IP Filter; RTMP; TCP
Interoperability	ONVIF Profile S&G&T; CGI
Streaming Method	Unicast; Multicast
User/Host	20
Storage	FTP; Micro SD card (512 GB)
Browser	IE 7 and later versions Chrome 42 and earlier versions Firefox 52 and earlier versions Safari
Management Software	Smart PSS; DMSS; player; configtool; NVR; Smart Player
Mobile Client	iOS; Android; iPhone; iPad; Windows Phone

Certification

Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014

Port

Audio Input	1 channel (bulit-in MIC)

Audio Output	1 channel (bulit-in Speaker)
Audio I/O	1/1
Two-way Audio	Yes
Alarm Linkage	Capture; preset; recording; audio; sending email
Alarm Event	Motion/Tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection; power exception detection

Power

Power Supply	12 VDC, 1.5 A (± 10%)
Power Consumption	Basic: 3.5 W Max.: 11 W (illuminator)

Environment

Operating Temperature	−30 °C to +55 °C (−22 °F to +131 °F)
Operating Humidity	≤ 95% RH
Protection	IP66; TVS 2000 V lightning proof; surge protection; voltage transient protection

Construction

Product Dimensions	146.5 mm × Φ118.0 mm (5.77" × Φ4.65")
Net Weight	0.5 kg (1.10 lb)
Gross Weight	1 kg (2.20 lb)

Ordering Information

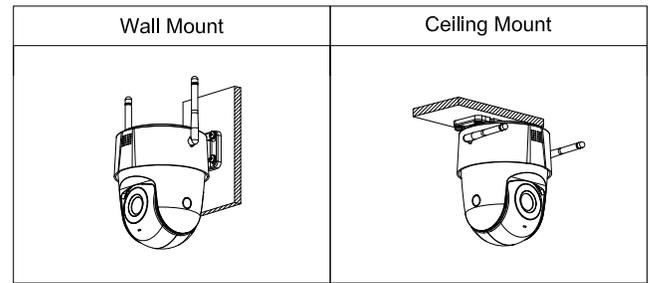| Type	Model	Description
5M Camera	DH-SD2A500-GN-AW-PV	5MP IR and White Light Network PT Camera
	SD2A500-GN-AW-PV	5MP IR and White Light Network PT Camera
Accessories (Optional)	DC12V/1.5A	Power Adapter

Accessories

Included:

Mount Bracket

Optional:

DC12V/1.5A
Power Adapter

Wall Mount	Ceiling Mount

Dimensions (mm[inch])